

# **Space Operations Management Office (SOMO)**

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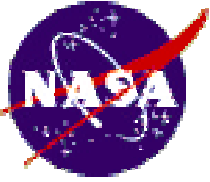
## **Space Operations Services and Customer Mission Support**

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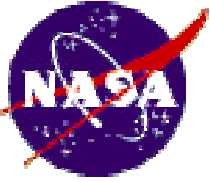


# Agenda

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- SOMO Goals
- SOMO Mission Services
- SOMO Data Services
- Consolidated Space Operations Contract
- Customer Mission Support
- Service Catalog and Prices
- Support to the AO Process
- Conclusion

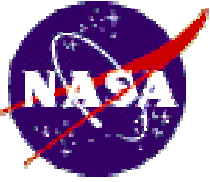


# SOMO Goals

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- The Space Operations Management Office is a distributed organization that provides mission and data services to most of the NASA missions. SOMO operates the space and ground networks, wide area and local data networks, and provides flight control, flight support, data processing and data storage services. SOMO also provides Range services.
- Provide space operations services that are responsive to customer missions at the lowest cost to the agency.
- Transition space operations services to commercial providers where possible.

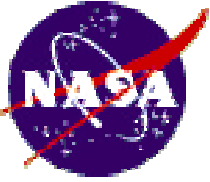


# SOMO Mission Services

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- Mission Planning
- Pre-launch Testing
- Mission Operations
  - Flight Control Services
  - Flight Dynamics Services
  - Science Data Processing Services
    - Generally Level 0 processing
- Data Storage Services

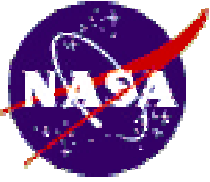


# SOMO Data Services

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- Ground Network Services
  - Alaska, Svalbard, McMurdo, Wallops, Merritt Island, and out-sourced commercial services
- Space Network Services
  - Tracking and Data Relay Satellite System (TDRSS) services
- Deep Space Network Services
  - Canberra, Goldstone, Madrid
- Range Services (e.g., aircraft, balloons, sounding rockets)
  - Western Aeronautical Test Range (WATR) Services
    - Radar, Telemetry Tracking, RF Communications, Flight Termination System, Video, Mission Control Center, Telemetry and Radar Acquisition Processing System, Mobile Systems
  - Wallops Range Services
    - Similar to WATR services
- Special Integration and Test Services (if required)

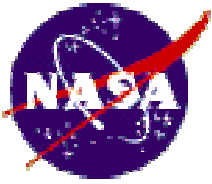


# SOMO Data Services

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- SOMO Wide Area Network Services
  - Approach: Integrate network communications across NASA Programs to reduce cost through sharing of circuits and services and through volume acquisition from commercial service providers.
  - Video Services
  - Voice Services
  - Facsimile Services
  - Routed Data Services
  - Custom Data Distribution Services
  - Information Technology and Network Infrastructure Services

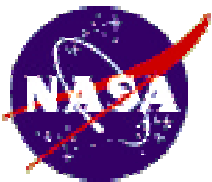


# Consolidated Space Operations Contract (CSOC)

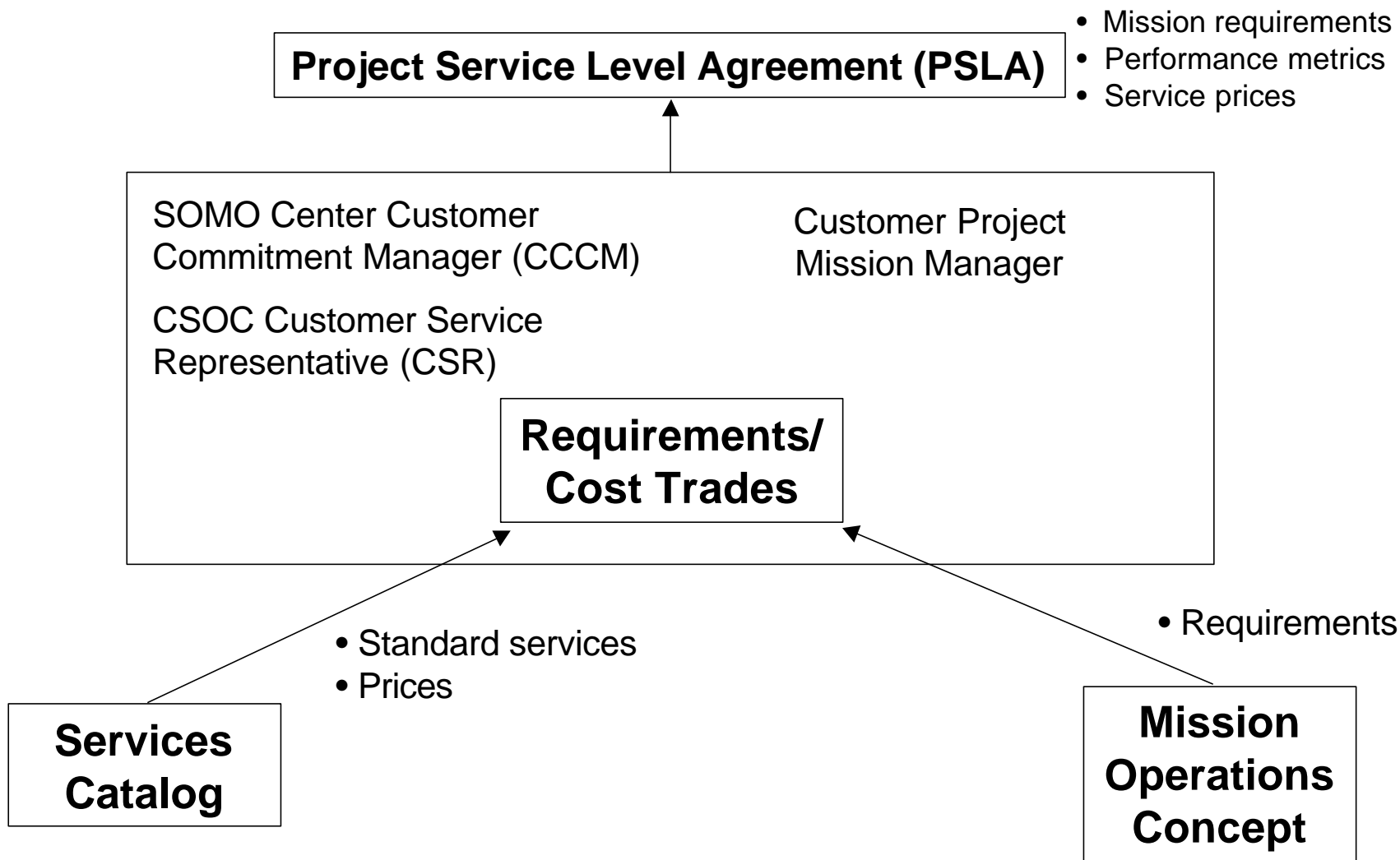
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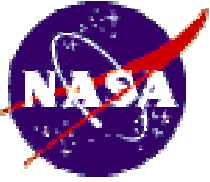
- SOMO Services are primarily provided via the CSOC
  - Administered by SOMO office at Johnson Space Center
  - Technical Management Representatives are at each Center
  - 10 year contract awarded to Lockheed Martin Space Operations Company
- NASA Centers have a Center Customer Commitment Manager
  - CSOC provides a Customer Services Director and Customer Service Representatives (CSRs)
  - Each project is assigned a primary point of contact, usually a CSR
  - CSR works across Centers to integrate customer requirements
  - CSOC and NASA managers will identify and resolve problems, as appropriate



# Customer Mission Support





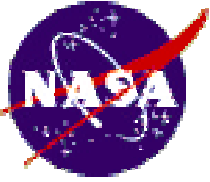


# Services Catalog

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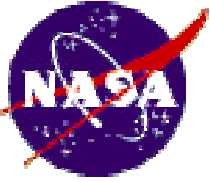
- The Space Operations Management Office (SOMO) Services Catalog
  - Contains SOMO operations services description and performance characteristics (both CSOC and non-CSOC)
  - Identifies service units
  - Available on SOMO homepage at:  
**<http://www.jsc.nasa.gov/somo/>**
  - Click on “**Customer Commitment Office**” and then on “**SOMO Services Catalog**”



# Service Prices

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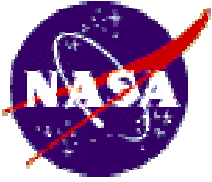
- Mission Services (Control Centers, Flight Dynamics, Data Processing)
  - Service costs are developed through requirements meetings with projects and determining support required
- Data Services (GN, SN, DSN, WAN)
  - Service prices are generally developed by determining a cost per unit of service
  - Based on cost of operating facilities and total utilization of facilities by all customer projects



# Support to the AO Process

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- SOMO and CSOC representatives will provide information on SOMO services and costs
  - Service and cost information will be provided in a timely manner
- Cost information can be provided to support alternative mission scenarios and to support comparison to any non-SOMO sources being considered
- If some requirements cannot be met through standard SOMO services, NASA will support definition of cost estimates for mission-unique support
- All proposal sensitive information will be held in confidence
- It is NASA policy to utilize operations strategies that yield the lowest life cycle cost to the Agency. SOMO-provided services should be utilized whenever they meet mission objectives and represent the lowest life cycle cost.



# Conclusion

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- SOMO is ready to assist you in the AO process
- To get started, contact one of the following:

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